joseph Morlier

List of Publications by Year
in descending order

83 papers	1,364 citations	471509 17 h-index	377865 34 g-index
85 all docs	85 docs citations	85 times ranked	1098 citing authors

#	Article	IF	Citations
1	A Python surrogate modeling framework with derivatives. Advances in Engineering Software, 2019, 135, 102662.	3.8	212
2	Improving kriging surrogates of high-dimensional design models by Partial Least Squares dimension reduction. Structural and Multidisciplinary Optimization, 2016, 53, 935-952.	3.5	140
3	Efficient global optimization for high-dimensional constrained problems by using the Kriging models combined with the partial least squares method. Engineering Optimization, 2018, 50, 2038-2053.	2.6	75
4	Smart monitoring of aeronautical composites plates based on electromechanical impedance measurements and artificial neural networks. Engineering Structures, 2013, 56, 794-804.	5.3	71
5	Adaptive modeling strategy for constrained global optimization with application to aerodynamic wing design. Aerospace Science and Technology, 2019, 90, 85-102.	4.8	69
6	Fabrication and mechanical testing of glass fiber entangled sandwich beams: A comparison with honeycomb and foam sandwich beams. Composite Structures, 2009, 90, 404-412.	5.8	67
7	Damage localization using experimental modal parameters and topology optimization. Mechanical Systems and Signal Processing, 2010, 24, 636-652.	8.0	49
8	An Improved Approach for Estimating the Hyperparameters of the Kriging Model for High-Dimensional Problems through the Partial Least Squares Method. Mathematical Problems in Engineering, 2016, 2016, 1-11.	1.1	40
9	Surrogate modeling approximation using a mixture of experts based on EM joint estimation. Structural and Multidisciplinary Optimization, 2011, 43, 243-259.	3.5	39
10	Multidisciplinary Design Optimization Framework with Coupled Derivative Computation for Hybrid Aircraft. Journal of Aircraft, 2020, 57, 715-729.	2.4	39
11	Experimental characterization of cohesive zone models for thin adhesive layers loaded in mode I, mode II, and mixed-mode I/II by the use of a direct method. International Journal of Solids and Structures, 2019, 158, 90-115.	2.7	34
12	Isogeometric sizing and shape optimization of thin structures with a solid-shell approach. Structural and Multidisciplinary Optimization, 2019, 59, 767-785.	3.5	33
13	The embedded isogeometric Kirchhoffâ€“Love shell: From design to shape optimization of non-conforming stiffened multipatch structures. Computer Methods in Applied Mechanics and Engineering, 2019, 349, 774-797.	6.6	32
14	Virtual Vibration Measurement Using KLT Motion Tracking Algorithm. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2010, 132, .	1.6	31
15	Damage localization map using electromechanical impedance spectrums and inverse distance weighting interpolation: Experimental validation on thin composite structures. Structural Health Monitoring, 2013, 12, 311-324.	7.5	22
16	Exploration and Sizing of a Large Passenger Aircraft with Distributed Ducted Electric Fans. , 2018, , .		22
17	Damage monitoring in sandwich beams by modal parameter shifts: A comparative study of burst random and sine dwell vibration testing. Journal of Sound and Vibration, 2010, 329, 566-584.	3.9	21
18	An extended semi-analytical formulation for fast and reliable mode I/II stress analysis of adhesively bonded joints. International Journal of Solids and Structures, 2015, 62, 18-38.	2.7	20

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19	New Image Processing Tools for Structural Dynamic Monitoring. Key Engineering Materials, 2007, 347, 239-244.	0.4	18
20	A dual domain decomposition algorithm for the analysis of non-conforming isogeometric Kirchhoffâ€“Love shells. Computer Methods in Applied Mechanics and Engineering, 2019, 357, 112578.	6.6	18
21	Correlating Low-energy Impact Damage with Changes in Modal Parameters: A Preliminary Study on Composite Beams. Structural Health Monitoring, 2009, 8, 523-536.	7.5	17
22	Generalized Geometry Projection: A Unified Approach for Geometric Feature Based Topology Optimization. Archives of Computational Methods in Engineering, 2020, 27, 1573-1610.	10.2	16
23	Diagnosis of a portal frame using advanced signal processing of laser vibrometer data. Journal of Sound and Vibration, 2006, 297, 420-431.	3.9	15
24	A new SSI algorithm for LPTV systems: Application to a hinged-bladed helicopter. Mechanical Systems and Signal Processing, 2014, 42, 152-166.	8.0	15
25	Improvement of efficient global optimization with application to aircraft wing design. , 2016, , .		15
26	An adaptive optimization strategy based on mixture of experts for wing aerodynamic design optimization. , 2017, , .		15
27	Monitoring the effects of impact damages on modal parameters in carbon fiber entangled sandwich beams. Engineering Structures, 2009, 31, 2833-2841.	5.3	14
28	Fabrication and Mechanical Testing of a New Sandwich Structure with Carbon Fiber Network Core. Journal of Sandwich Structures and Materials, 2010, 12, 569-589.	3.5	13
29	Evaluation of the Impact Resistance of Various Composite Sandwich Beams by Vibration Tests. Shock and Vibration, 2011, 18, 789-805.	0.6	11
30	Multi-fidelity efficient global optimization: Methodology and application to airfoil shape design. , 2019, , .		11
31	Stress-based topology optimization of compliant mechanisms using nonlinear mechanics. Mechanics and Industry, 2020, 21, 304.	1.3	10
32	A New Lighting on Analytical Discrete Sensitivities in the Context of IsoGeometric Shape Optimization. Archives of Computational Methods in Engineering, 2021, 28, 2371-2408.	10.2	10
33	A well connected, locally-oriented and efficient multi-scale topology optimization (EMTO) strategy. Structural and Multidisciplinary Optimization, 2021, 64, 3705-3728.	3.5	8
34	Development of a Dynamic Virtual Reality Model of the Inner Ear Sensory System as a Learning and Demonstrating Tool. Modelling and Simulation in Engineering, 2009, 2009, 1-10.	0.7	7
35	Performance improvement of small-scale rotors by passive blade twist control. Journal of Fluids and Structures, 2015, 55, 25-41.	3.4	7
36	An MDO-based methodology for static aeroelastic scaling of wings under non-similar flow. Structural and Multidisciplinary Optimization, 2021, 63, 1045-1061.	3.5	7

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37	Towards an analytical formulation for fluid structure tank vibration analysis: Modal equivalency using granular materials. Engineering Structures, 2018, 177, 345-356.	5.3	6
38	A bi-level methodology for solving large-scale mixed categorical structural optimization. Structural and Multidisciplinary Optimization, 2020, 62, 337-351.	3.5	6
39	Similarity Maximization of a Scaled Aeroelastic Flight Demonstrator via Multidisciplinary Optimization. , 2017, , .		5
40	Surrogate Granular Materials for Modal Test of Fluid Filled Tanks. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 139-146.	0.5	5
41	Mixed Variable Structural Optimization: Toward an Efficient Hybrid Algorithm. , 2018, , 1880-1896.		5
42	Benchmark of Damage Localisation Algorithms Using Mode Shape Data. Key Engineering Materials, 2005, 293-294, 305-312.	0.4	4
43	Significance of low energy impact damage on modal parameters of composite beams by design of experiments. Journal of Physics: Conference Series, 2009, 181, 012045.	0.4	4
44	Subspace Instability Monitoring for Linear Periodically Time-Varying Systems*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 380-385.	0.4	4
45	Subspace Identification for Linear Periodically Time-varying Systems*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1282-1287.	0.4	4
46	An EGO-like optimization framework for sensor placement optimization in modal analysis. Smart Materials and Structures, 2018, 27, 075004.	3.5	4
47	Preliminary Sizing of a Medium Range Blended Wing-Body using a Multidisciplinary Design Analysis Approach. MATEC Web of Conferences, 2018, 233, 00014.	0.2	4
48	A Bilevel Methodology for solving a Structural Optimization Problem with both Continuous and Categorical Variables. , 2018, , .		4
49	Engine Pylon Topology Optimization Framework Based on Performance and Stress Criteria. AIAA Journal, 2019, 57, 5514-5526.	2.6	4
50	Aeroelastic scaling of flying demonstrator: flutter matching. Mechanics and Industry, 2021, 22, 42.	1.3	4
51	Experimental testing of pre-stressed granular assemblies as a surrogate material for the dynamic analysis of launcher cryogenic tanks. Engineering Structures, 2019, 197, 109433.	5.3	3
52	Weighted Average Continuity Approach and Moment Correction: New Strategies for Non-consistent Mesh Projection in Structural Mechanics. Archives of Computational Methods in Engineering, 2019, 26, 1415-1443.	10.2	3
53	Extension of Subspace Identification to LPTV Systems: Application to Helicopters. Conference Proceedings of the Society for Experimental Mechanics, 2012, , 425-433.	0.5	3
54	Multidisciplinary design optimization with mixed categorical variables for aircraft design. , 2022, , .		3

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55	Constrained Multi-Objective Bayesian Optimization with Application to Aircraft Design. , 2022, , .		3
56	A Matlab/Simulink Model of the Inner Ear Angular Accelerometers Sensors. , 2009, , .		2
57	Design of Optimum Torsionally Flexible PropRotors for Tilt-Body MAVs. Applied Mechanics and Materials, 0, 225, 281-286.	0.2	2
58	Topology Optimization for Robust Damage Localization Using Aggregated FRFs Statistical Criteria. Applied Mechanics and Materials, 2014, 629, 513-518.	0.2	2
59	Original Pylon Architecture Design Using 3D HPC Topology Optimization. , 2018, , .		2
60	Adding Control in Multidisciplinary Design Optimization of a Wing for Active Flutter Suppression. , 2021, , .		2
61	Modeshapes Recognition Using Fourier Descriptors: A Simple SHM Example. Conference Proceedings of the Society for Experimental Mechanics, 2012, , 195-204.	0.5	2
62	On some applications of Generalized Geometric Projection to optimal 3D printing. Computers and Graphics, 2021, 102, 199-199.	2.5	2
63	Sparse Physics-based Gaussian Process for Multi-output Regression using Variational Inference. , 2016, , .		2
64	An Application of Adaptive Blades on Convertible MAVs. International Journal of Micro Air Vehicles, 2013, 5, 229-243.	1.3	1
65	Uncertainties Quantification for Subspace Identification of Rotating Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 35-40.	0.4	1
66	Study of a flexible UAV proprotor. International Journal of Engineering Systems Modelling and Simulation, 2014, 6, 149.	0.2	1
67	Adding Flight Mechanics to Flight Loads Surrogate Model using Multi-Output Gaussian Processes. , 2016, , .		1
68	Multidisciplinary Design and Architecture Optimization of a Reusable Lunar Lander. Journal of Spacecraft and Rockets, 2021, 58, 1186-1199.	1.9	1
69	Compressed Sensing Applied to Modeshapes Reconstruction. Conference Proceedings of the Society for Experimental Mechanics, 2012, , 1-8.	0.5	1
70	Gaussian Process for Aerodynamic Pressures Prediction in Fast Fluid Structure Interaction Simulations. , 2018, , 221-233.		1
71	Approximate Inference in Related Multi-output Gaussian Process Regression. Lecture Notes in Computer Science, 2017, , 88-103.	1.3	1
72	Aeroelastic scaling of flying demonstrators: mode tracking technique. Mechanics and Industry, 2022, 23, 2.	1.3	1

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73	A mixed-categorical data-driven approach for prediction and optimization of hybrid discontinuous composites performance. , 2022, , .		1
74	Harmonic Response of the Organ of Corti: Results for Wave Dispersion. , 2011, , .		0
75	Performance Enhancement of Tilt-Body Micro Air Vehicle by Use of Orthotropic Laminated Proprotors. Applied Mechanics and Materials, 0, 819, 585-590.	0.2	0
76	Nonlinear transient Fluid/Structure interaction approach using surrogate models: Industrial application to aircraft fairing vibration excited by engine efflux. , 2016, , .		0
77	Pylon and Engine Mounts Performance Driven Structural Topology Optimization. , 2018, , 1349-1363.		0
78	Sandwich shield subjected to bird impact: Use of surrogate models for influencing parameter analysis and shield behaviour understanding. Journal of Sandwich Structures and Materials, 2020, 22, 2364-2390.	3.5	0
79	Multifidelity Aeroelastic Optimization with Application to a BWB.. , 2021, , .		0
80	Application of Modal Analysis for Evaluation of the Impact Resistance of Aerospace Sandwich Materials. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 171-177.	0.5	0
81	A pedagogical image processing tool to understand structural dynamics. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 1215-1224.	0.5	0
82	Estimation of Modal Parameters Confidence Intervals: A Simple Numerical Example. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 611-620.	0.5	0
83	A general square exponential kernel to handle mixed-categorical variables for Gaussian process. , 2022, , .		0